XEP-0381: Internet of Things Special Interest Group (IoT SIG)

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This document proposes the formation of a Special Interest Group SIG) within the XSF devoted to the application of XMPP technologies to the Internet of Things (IoT).

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Contents

1 Introduction

The Internet of Things (IoT) involves the application of Internet technologies to physical things such as machines, vehicles, buildings, appliances, and industrial infrastructure. XMPP-based implementations already exist in several areas of IoT, including demand-response systems for power grids via the OpenADR Alliance <http://www.openadr.org/> and smart transducer interfaces via the IEEE XMPP Interface Working Group <http://standards.ieee.org/develop/wg/XMPPI.html>. In addition, a number of XMPP Extension Protocols (XEPs) have been proposed at the XMPP Standards Foundation (XSF) over the years related to the Internet of Things.

Unfortunately, there has been a lack of communication and coordination among the various IoT initiatives in the broader XMPP community of developers and standards development organization. To improve matters, the authors of this document propose to create a forum and process for constructive discussions within the XSF, in the form of an Internet of Things Special Interest Group (IoT SIG) that shall be structured in compliance with Special Interest Groups (XEP-0002) [1] and that shall report to the XMPP Council [2] in accordance with Article VIII of the XSF's XSF Bylaws [3].

2 Scope and Role

The role of the IoT SIG shall be as follows:

- Produce, or coordinate the production, of relevant XMPP Extension Protocol (XEP) documents as described below under Deliverables.

- Provide advice to the XMPP Council regarding work within the XSF on IoT topics.

- Provide advice to the XMPP Council and the XSF Board of Directors regarding work outside the XSF happening at other standards development organizations.

- Manage a dedicated forum for discussion of IoT topics within the XMPP community.

The IoT SIG shall not itself approve XMPP extension protocols (XEPs), which tasks shall remain under the purview of the XMPP Council.

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[1] XEP-0002: Special Interest Groups <https://xmpp.org/extensions/xep-0002.html>.

[2] The XMPP Council is a technical steering committee, authorized by the XSF Board of Directors and elected by XSF members, that approves of new XMPP Extensions Protocols and oversees the XSF's standards process. For further information, see <https://xmpp.org/about/xmpp-standards-foundation#council>.

[3] The Bylaws of the XMPP Standards Foundation (XSF) define the legal basis and operating procedures of the XSF. For further information, see <https://xmpp.org/about/xsf/bylaws>.

3 Membership

The IoT SIG shall be open to the public and shall not be limited to elected members of the XMPP Standards Foundation. IoT SIG discussions shall be conducted in open forums, including a dedicated mailing list at <iot@xmpp.org> (which already exists).

4 Lifetime

The IoT SIG shall be a standing SIG, and shall exist as long as the XMPP Council deems it useful.

5 Deliverables

The IoT SIG should at a minumum produce an informational XEP that provides an overview of the XMPP IoT "landscape"; this document could help the XMPP community (including XSF members, leadership, and teams) understand the Intenet of Things and especially the applicability of XMPP to common IoT use cases.

The IoT SIG should also produce or coordinate the production of core protocol specifications or profiles that are suitable for use in common IoT use cases. If the IoT SIG produces such protocol specifications, they should be designed so that they can be extended by private parties or other standards development organizations for more particular use cases. In coordination with the XMPP Council, the IoT SIG may also produce a requirements document or roadmap to guide its work on protocol specifications.